



October 27, 2006

Sent via email

Eric Johnson
U.S. Environmental Protection Agency
Region 8, 8ENF-T
999 18th Street, Suite 300
Denver, Colorado 80202-2466

RE: Progress report for September 2006 activities - Hecla Mining Company Apex Site (EPA
ID No. UT982589848, Docket No. RCRA-8-99-06)

Dear Mr. Johnson:

Per paragraph 64 of the Order, enclosed is a copy of the September 2006 progress report for
your records.

If you have any questions please do not hesitate to call me at (208) 769-4112 or e-mail at
pglader@hecla-mining.com.

Sincerely,

A handwritten signature in black ink, appearing to read "P. Glader", written over a horizontal line.

Paul L. Glader
Manager Environmental Services

Encl

Cc: HMC Legal Dept (w/o attachments)
John Jacus, Esq. (DG&S)



October 27, 2006

Sent via U.S. Mail

Glenn Rogers, Chairman.
Shivwits Band of Paiute Indian Tribe
P.O. Box 448
Santa Clara, Utah 84765

John Krause
Bureau of Indian Affairs Phoenix Area Office
U.S. Department of Interior
P.O. Box 10
Phoenix, AZ 85001

Kelly Youngbear
BIA Southern Paiute Agency
P.O. Box 720
St. George, UT 84771

RE: Progress report for August 2006 activities - Hecla Mining Company Apex Site (EPA ID No. UT982589848, Docket No. RCRA-8-99-06)

Dear Chairman Rogers, Mr. Krause and Ms. Youngbear:

Per paragraph 64 of the Order, enclosed is a copy of the September 2006 progress report for your records.

If you have any questions please do not hesitate to call me at (208) 769-4112 or e-mail at pglader@hecla-mining.com.

Sincerely,

A handwritten signature in black ink, appearing to read "P. Glader", written over a horizontal line.

Paul L. Glader
Manager Environmental Services

Encl

Cc: HMC Legal Dept. (w/o attachments)
John Jacus, Esq. (DG&S) (w/o attachments)
Eric Johnson (USEPA, Region VIII) (w/o attachments)



October 27, 2006

MEMORANDUM TO: Apex File

COPIES TO: distribution

FROM: Paul Glader *PG*

SUBJECT: Progress Report No. 29 for period ending September 30, 2006; Pond 2 Final Closure - Apex Site, Washington County, Utah

Summary

The ninth visual inspection, per the long term monitoring plan, was conducted on September 18th. No unusual conditions were noted, continue to see some salt formation near the toe of the rock-armored out slopes. Investigation has shown the source to be recent rainfall contacting the natural mineralization contained in the site-sourced construction material. The August 18th repair work on the flow channel on the east side of the pond is functioning well.

The settlement monuments were surveyed in September - no appreciable settlement has been noted.

Discussion

1. Surface Monitor Results To Date – Since monitoring of the top surface began (Jan 4, 2006), there has been no appreciable movement in the surface monuments at the Apex site. Significant decreases in elevation could have meant large volume changes within the impoundment due to either (1) consolidation of enclosed materials, or (2) loss of liquid through leaks in the impoundment.

There are ten monuments installed on the top surface. As shown, between installation of the monuments and the July 10, 2006 monitoring period any movements have been slight and can be attributed to surveying accuracy limitations.

Monument	Total Elevation Change Since 1/4/06 (feet)
1	-0.01
2	0.02
3	0.00
4	0.05
5	0.04
6	0.02
7	-0.06
8	0.00
9	-0.01
10	0.02

Please see the attached "Surface Monument Survey Data Review" dated October 4, 2006 by Monster Engineering Inc.

Work Planned for Next Period

1. Visual inspection of site.
2. Settlement monument survey – will take place quarterly basis - December.

Sampling and Analysis in Period

Field Tests, Inspections & QA/QC

1. The ninth site inspection was done on September 18th; a copy of the inspection report is included in the Supplemental Attachments section.

Cost and Schedule

Committed costs in September 2006 were approximately \$852. Total project to date committed is approximately \$1,240,000.

The cost report for August is attached. Current status of the deliverables listed in the RCRA 7003 order is as follows:

Deliverable	Reference Paragraph	Due	Remarks
Post warning signage around perimeter of site	57	15 days after effective date of order	Work completed on March 9, 2004
Begin implementation of closure plan	63	45 days after receipt of filing of order	Work started on February 23, 2004
Monthly progress reports	64	28th day after close of month	Requirement in effect after order is filed.
Completion report	66	30 days after completion of all closure plan tasks	Construction completion report submitted on 3/13/2006. A follow-up report to be issued after end of monitoring period.

The update of the schedule milestones is on the following table:

Milestone	Target	Actual	Remarks
Issue bid package – Phase I (Sump Drains)	6/14/04	6/15/04	Portion of RFP materials issued at pre-bid on 6/14/04; remainder sent via courier
Issue RFP package – Phase III	6/24/04	6/24/04	
Award contract for Phase I	6/24/04	6/29/04	Date contract was shipped to Hughes
Pre-bid meeting – Phase III	7/19/04	7/19/04	
Start Phase I (Sump Drains) construction	7/12/04	7/19/04	
Start Phase II (Evaporation)	7/19/04	7/29/04	
Receive bids for Phase III	8/2/04	8/2/04	
Re-bid Phase III contract package	April 2005	4/27/05	Date bid package was sent to Hughes
Start Phase III construction	End of August 2005	8/29/05	Start of contractor mobilization
Complete Phase III construction	Dec 23rd 2005	12/23/05	Completion of contract scope of work
Issue Construction Completion Report	Week of 3/13/2006	3/13/06	

Supplemental Attachments

1. September 18, 2006 long term monitoring inspection report, by D. Truman.
2. September Cost Report
3. October 4, 2006 Surface Monument Survey Data Review, by Monster Engineering Inc.

Annual Site Inspection Summary Sheet - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 1 of 4 - Summary

Date: <u>9-18-06</u>			
Inspector: <u>Doug Tanner</u>			
Cover System Component	Potential Problem		Limits Potentially Exceeded
Site Perimeter	Erosion or Fencing Issues		NA
Cover System (outslopes, top, rock)	Subsidence		Minor: ponding < 1" some gullying / erosion Yes <u>✓</u> * No <u> </u>
			Significant: see Table 2 Yes <u> </u> * No <u>✓</u>
	Embankment Slope Stability		excessive movement or surface cracks > than 1" Yes <u> </u> * No <u>✓</u>
	Gullying	on top	depth > 1" Yes <u> </u> * No <u>✓</u>
		at embankment crest or on outslope	depth > 2" Yes <u> </u> * No <u>✓</u>
		w/in normal flow channel in diversion channel	no gullying allowed Yes <u> </u> * No <u>✓</u>
		w/in diversions at toe of impoundment outslope	no gullying allowed Yes <u> </u> * No <u>✓</u>
		in diversion channel at any other location	NA NA
	Erosion Protection Stability		rock subsiding or missing Yes <u> </u> * No <u>✓</u>
	Seepage		no colored seepage allowed (red, blue, yellow w/ crystallization) Yes <u> </u> * No <u>✓</u>
Runoff Control System	Diversion Channel		rock in place, channel not moving, fence stable Yes <u>✓</u> * No <u> </u>
	Diversion Swales		rock in place, no silting in or head cutting Yes <u>✓</u> * No <u> </u>
	Excessive silt build up at fence lines in diversion channel		allowed if not effecting cover system Yes <u>✓</u> * No <u> </u>

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecia Mining Company - Long-Term Maintenance and Monitoring Plan

Form 2 of 4 - Site Perimeter

Inspection Date: <u>9-18-06</u>	
Inspector: <u>D. Truman</u>	
Visible Outlying Areas	
Observed Condition:	<u>no visible problems</u>
Observed Damage:	<u>NONE</u>
May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Property Boundary Fence and Gate (walk fence line)	
Observed Condition:	<u>Fence and Sign are in good Repair</u>
Observed Damage:	<u>NONE</u>
Potential Corrective Actions:	<u>NONE</u>
May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
All Upgradient Areas (areas that drain onto property)	
Observed Condition:	<u>No New problems</u>
Observed Damage:	<u>NONE</u>
May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 3 of 4 - Impoundment

Inspection Date: <u>7-18-16</u>			
Inspector: <u>Thomson</u>			
Outslopes			
Observed Performance:	Rock Cover Subsidence:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Excessive Slope Movement (failure):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Gully Development:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Observable Leachate (colored):	Yes <input type="checkbox"/> No <input type="checkbox"/> (maybe)	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Excessive Siltation (at slope toe):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Observed Damage:			
Potential Corrective Actions:	<u>I don't know how the feet come out w/ D. Gibbs</u>		
Top (top surface soils)			
Observed Performance:	Cracking (>1" width):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Settlement / Evidence of Ponding:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Erosion / Gullyng:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Observed Damage: <u>None</u>			
Potential Corrective Actions: <u>None</u>			
Erosion Protection Layer (rock)			
Observed Performance:	Rock Staying in Place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Rock Subsiding:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Missing Rock:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Observed Damage: <u>None</u>			
Potential Corrective Actions: <u>None</u>			

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 4 of 4 - Diversion Channel and Swales

Date: <u>9-18-06</u>			
Inspector: <u>D. [Signature]</u>			
Diversion Channel			
Observed Performance:	Erosion Protection in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Normal Flow Channel in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Encroaching on Site Fencing:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Observed Damage: <u>None</u>			
Potential Corrective Actions:	<u>Don G. [Signature] made some correction to one of the flow channels on the east side of the pond. It's working correctly now.</u>		
Diversion Swales			
Observed Performance:	Erosion Protection in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Flow Channel Sifting In:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Head Cutting:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Observed Damage: <u>None</u>			
Potential Corrective Actions:	<u>None</u>		

* Mark all areas of concern or requiring repairs on attached site map.

Activity	2004 Budget	Revised Budget May 2004	Committed Cost this Period	Cumulative Committed Cost To Date 9-30-06	Forecasted Cost To Complete	Forecasted Final Cost	Remarks on Forecast to Complete
Phases I through III (Completed February 2006)							
Phase I - Drain Excess Liquid From Tailings	189,200	72,700		67,928	0	67,928	
Phases II, IIA + IIB - Evaporate Excess Liquid	6,000	8,000		242,882	0	242,882	
Phase III - Regrading & Final Cover System	337,000	342,050		504,742	0	504,742	
Field Indirect Costs	164,500	213,568		378,517	0	378,517	Includes Jan + Feb 2006 long term monitoring costs
Hecla Costs	18,700	18,700	0	33,324	0	33,324	
Subtotal Phases I through III	715,400	655,018	0	1,227,393	0	1,227,393	
Long Term Monitoring (through FY 2010)							
Site Inspections			177	924	3,761	4,685	
Settlement Monitoring			675	3,375	6,750	10,125	
Consultant Support:							
Annual Geotechnical Engineer Inspections			0	2,495	18,100	20,595	Includes settlement monitoring data analysis
Vegetation Monitoring			0	0	20,000	20,000	Allowance for surveys in FY 2007, 2009 and 2010
Site Conditions Review - MEI			0	3,161			
Site Conditions Review - SVL Analytical			0	891			
Maintenance:							
Erosion Repair Allowance			0	0	7,500	7,500	
Overseeding Allowance			0	0	9,920	9,920	
Hecla Project Management Costs:							
Labor			0	2,066	8,109	10,175	
Travel expenses			0	0	1,312	1,312	
Subtotal Long Term Monitoring	0	0	852	12,912	75,452	84,312	
Total Pond 2 Final Closure	715,400	655,018	852	1,240,305	75,452	1,311,705	

MONSTER ENGINEERING INC
ENGINEERING • DESIGN • MANAGEMENT
3031 Hammer Spring Ranch Road
Lafayette, Colorado 80526
(970) 221-7177
Fax (970) 224-0161
email: monster@peakpeak.com



Rec'd 10/4/06
RG

MEMORANDUM

TO: Paul Glader (Hecla Mining Company)
FROM: Doug Gibbs (Monster Engineering Inc.)
DATE: 10/4/06
SUBJECT: **Surface Monument Survey Data Review – Apex Site**

Based on monthly data provided by Alpha Engineering (January to July) surface monuments at the Apex Site have not moved appreciably since the initial monitoring period (1/4/06). These monuments are utilized to monitor cover surface elevation changes. There are currently ten monuments (#1 through #9 and #11) installed on the top surface of the impoundment. Monument #10 is located off of the impoundment near the entrance gate and is used as the baseline point for surveying the remaining monuments.

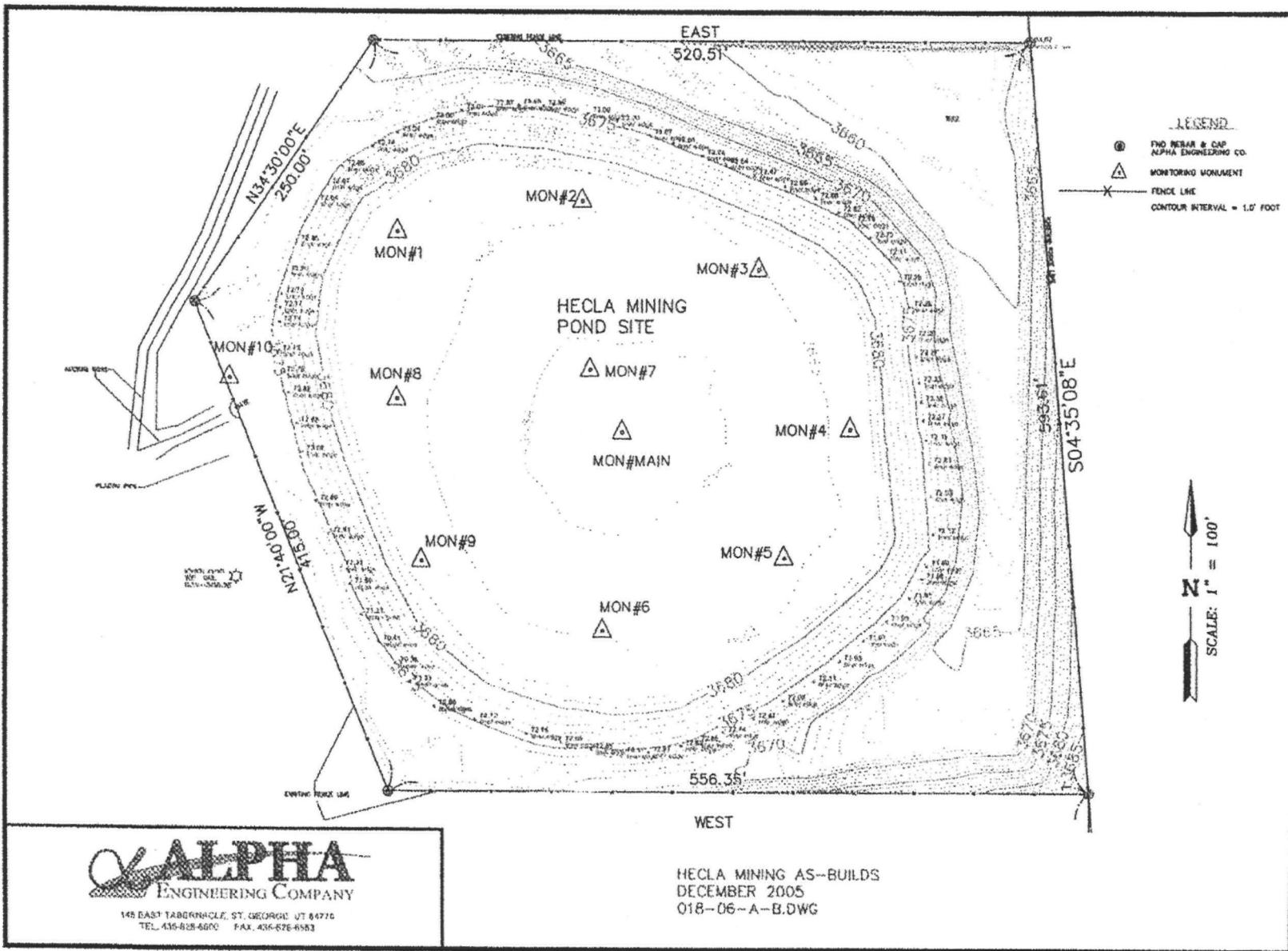
To date it appears that most apparent movement can be attributed to surveying accuracy limitations as monitoring data continues to show individual monuments both increasing and decreasing in elevation from monitoring period to monitoring period. Monument #7 (near the center of the impoundment) appears to be the only monument that has consistently decreased since February. Some settlement in this area nearer the center of the impoundment is not unexpected as significant quantities of fill were placed during construction. Total apparent settlement at monument #7 has been 0.06 feet (0.72 inches) in approximately 5 months. Conversely, the elevation for monument #11, which is located at the center, and high point of the impoundment, and very near monument #7, has been very consistent since installation. Monument #11 has moved a total of only +0.01 feet since installation.

Between the first monitoring period in January and the latest monitoring period (7/10/06), elevations of two monuments have not changed (#3 and #8), three have decreased (#1, #7, and #9), and five have increased (#2, #4, #5, #6, and #11) as shown in the table on the following page.

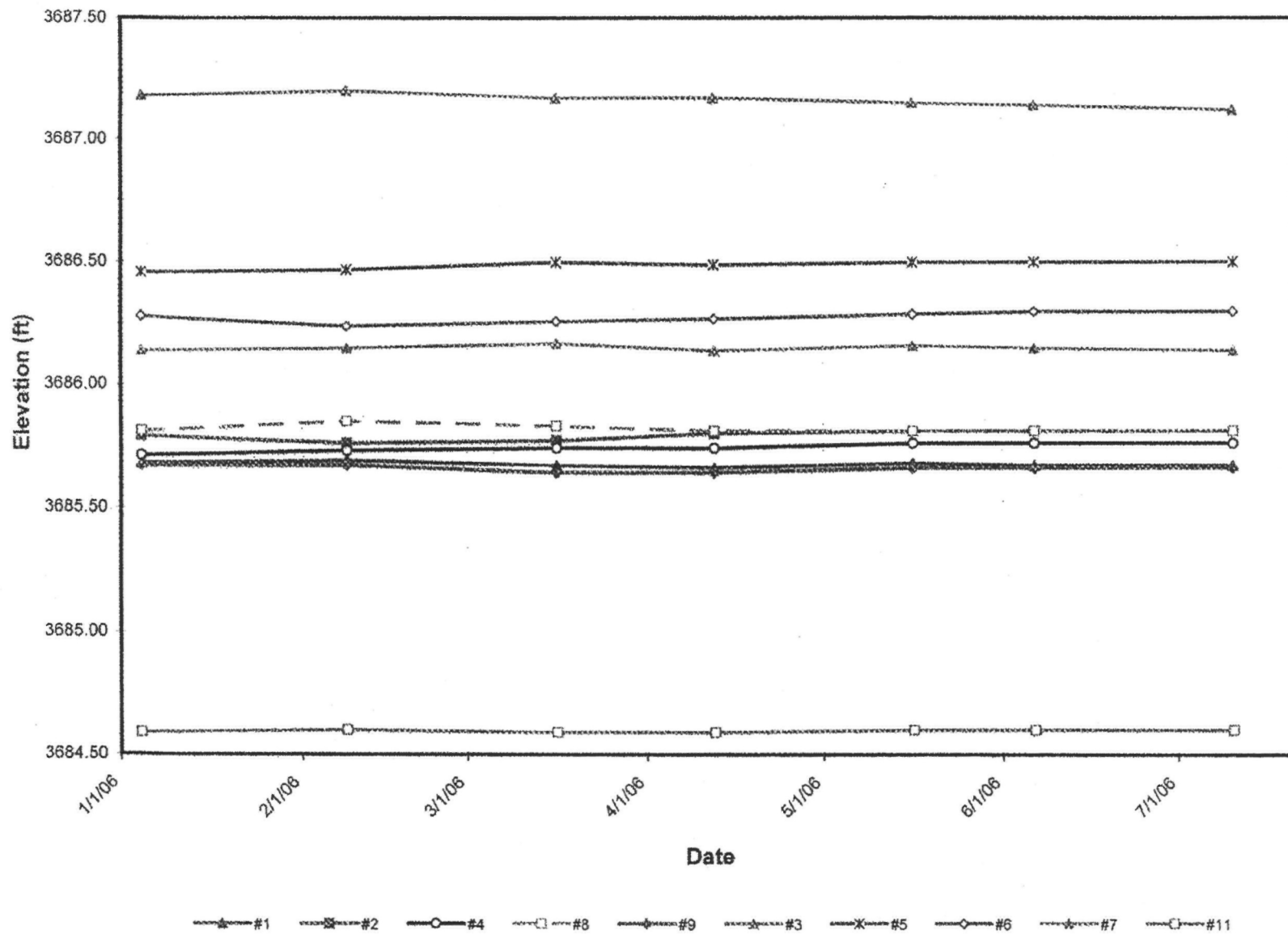
Monument	Total Elevation Change Since January 4, 2006 (feet)
1	-0.01
2	0.02
3	0.00
4	0.05
5	0.04
6	0.02
7	-0.06
8	0.00
9	-0.01
10 (baseline @ gate)	0.02
11 (main/@ center)	0.01

All elevation data provided by Alpha Engineering is presented graphically on the attached pages. The first graph shows all monuments (except #10 the baseline point) on a scale that allows all data to be compared. The next five graphs have expanded and equivalent "Y" axes scales in order to more clearly show elevation changes and for ease of comparison between graphs.

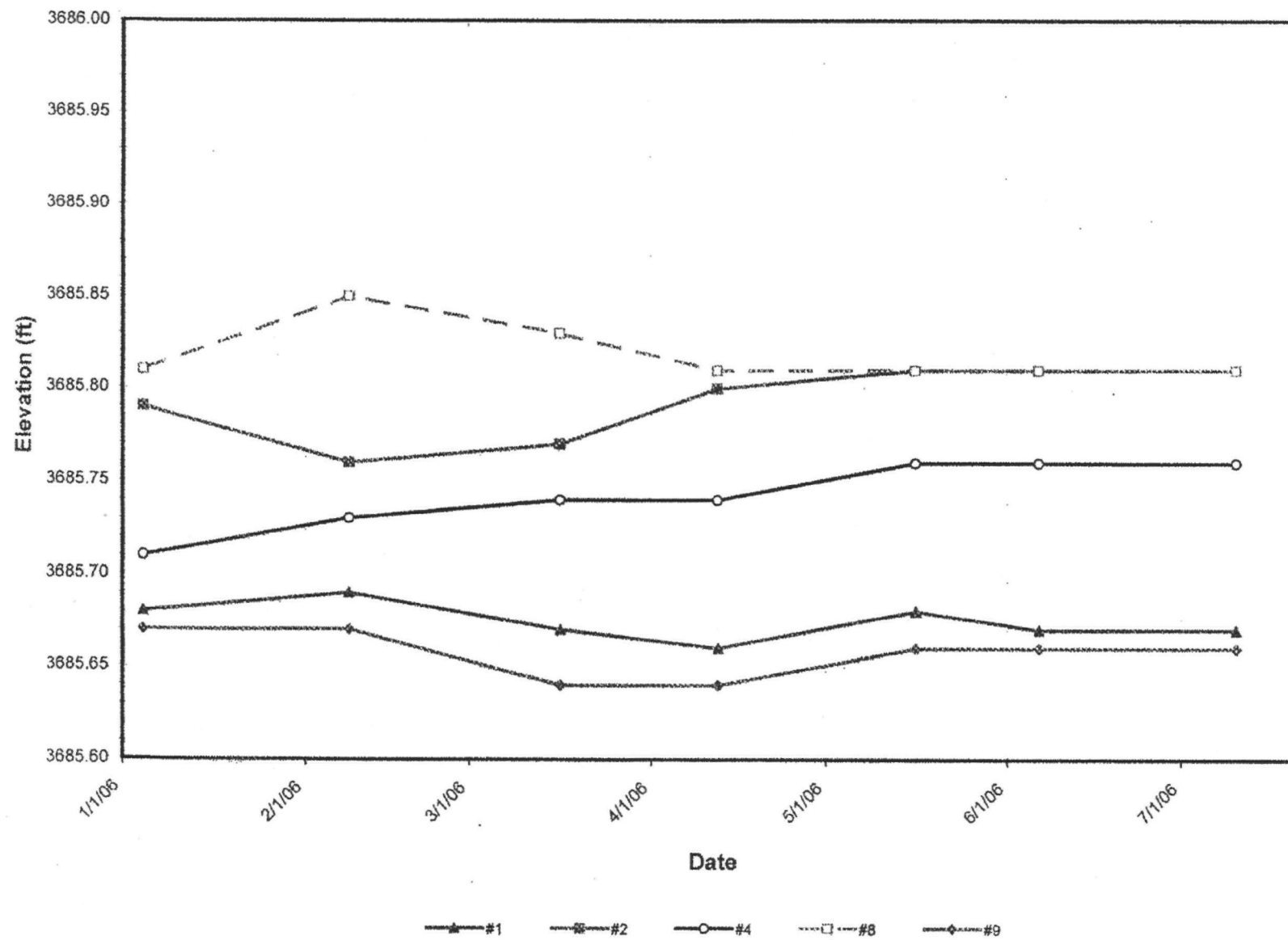
Based on data collected to date, MEI recommends that Hecla continue with their plan to decrease data collection frequency to quarterly. Please call or email me if you have any questions concerning this review.



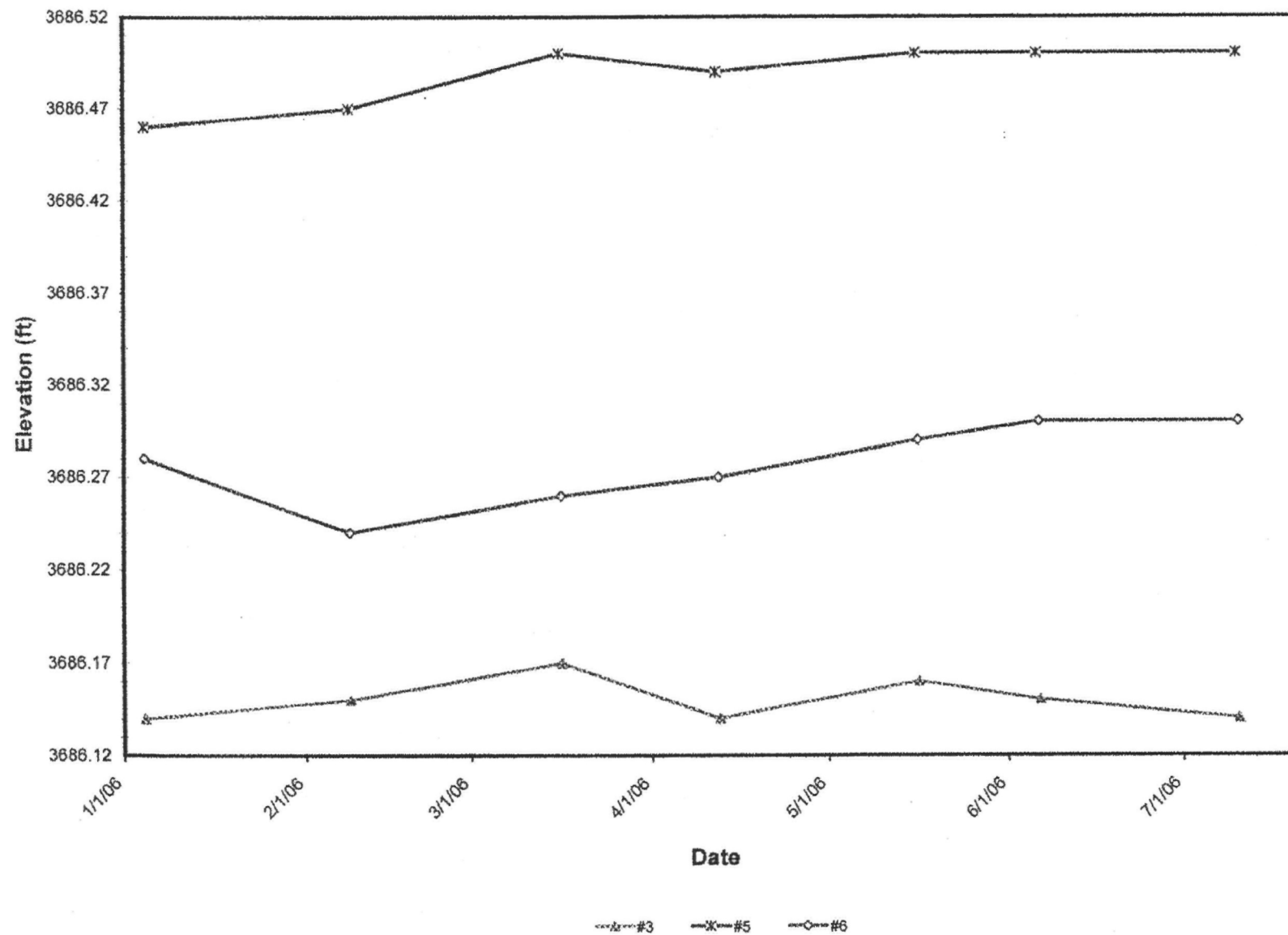
Apex Pond 2 - Settlement Monument Elevations



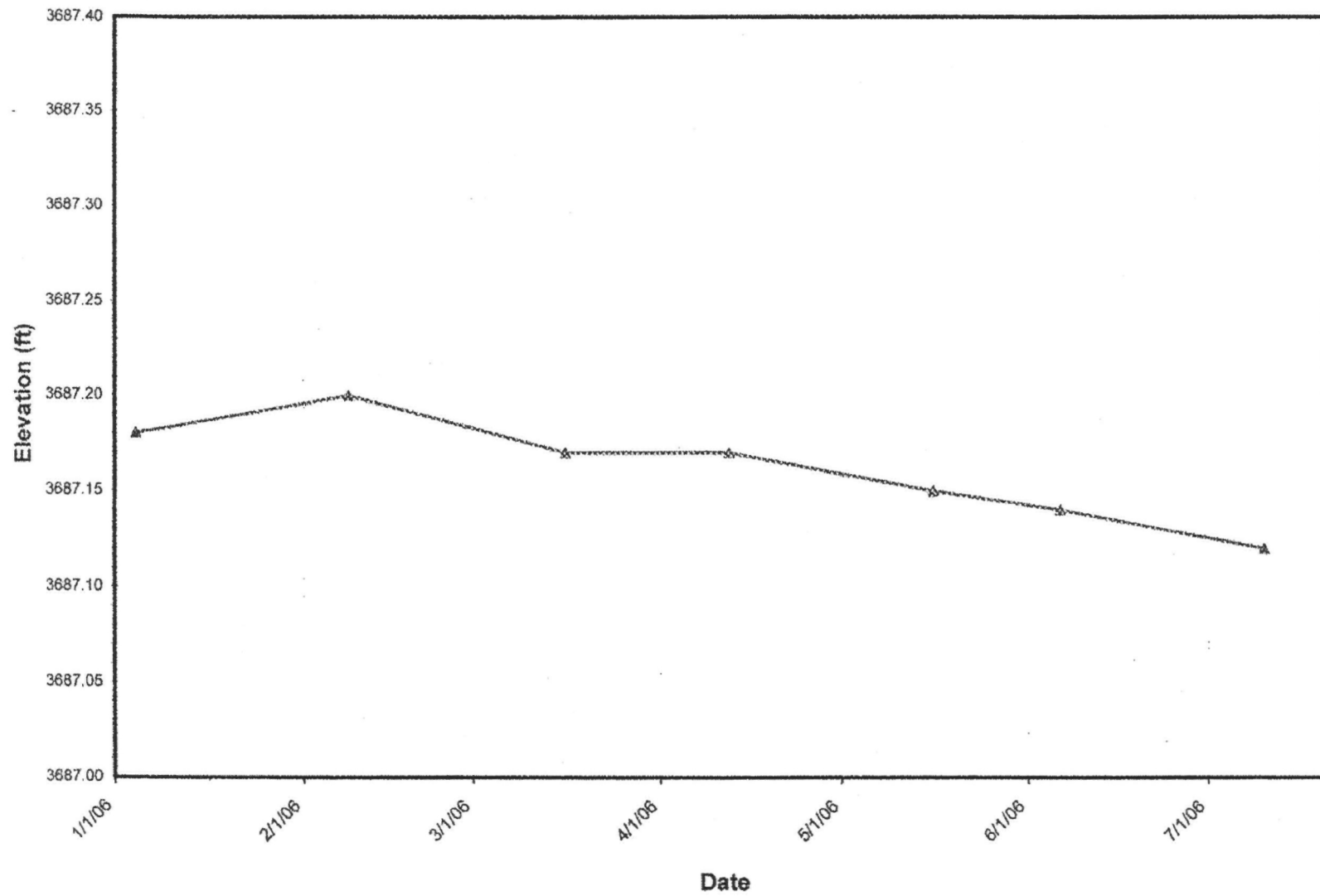
Apex Pond 2 - Settlement Monument Elevations



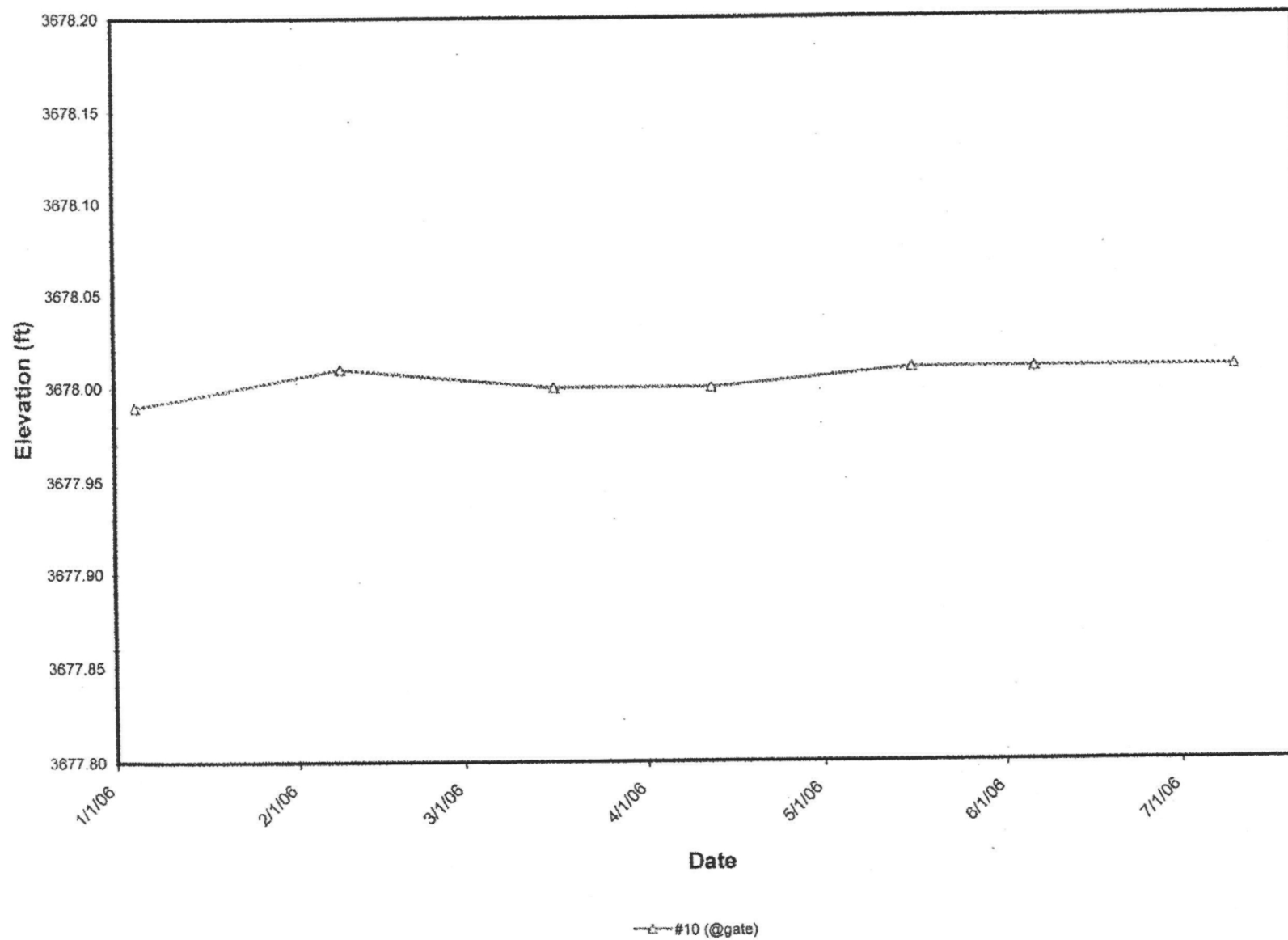
Apex Pond 2 - Settlement Monument Elevations



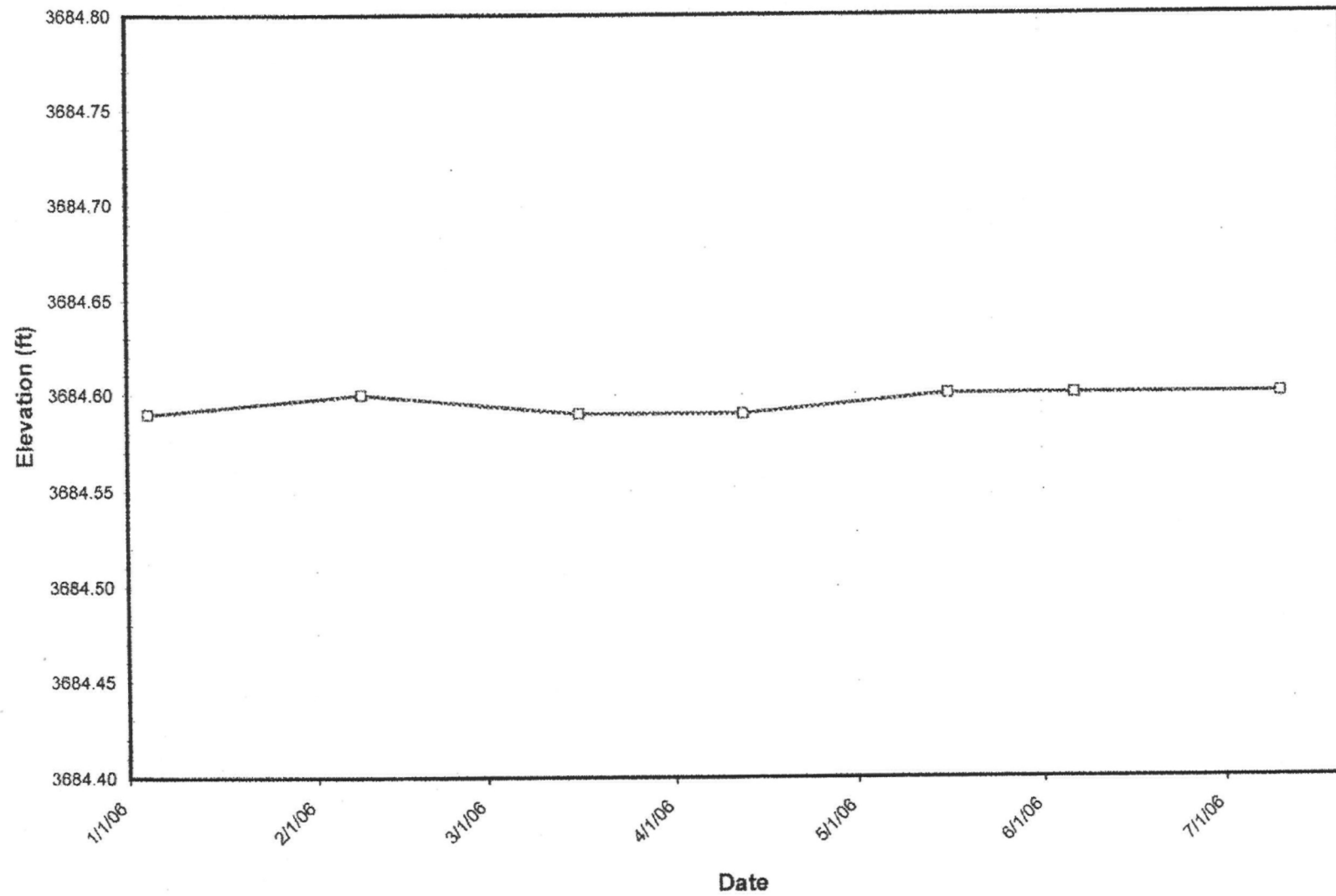
Apex Pond 2 - Settlement Monument Elevations



Apex Pond 2 - Settlement Monument Elevations



Apex Pond 2 - Settlement Monument Elevations



~Ch#11

Ericr
Johnson/ENF/R8/USEPA/US
10/30/2006 07:57 AM

To Amy Swanson/ENF/R8/USEPA/US@EPA, Donna
Jackson/P2/R8/USEPA/US@EPA
cc
bcc
Subject Fw: Apex - September 2006 Monthly Report

----- Forwarded by Eric Johnson/ENF/R8/USEPA/US on 10/30/2006 07:56 AM -----



Paul Glader
<pglader@hecla-mining.com>
>
10/27/2006 02:45 PM

To Eric Johnson/ENF/R8/USEPA/US@EPA
cc Kate Woempner <kwoempner@hecla-mining.com>
Subject Apex - September 2006 Monthly Report



Apex Pond 2 - progress rpt 29 complete, september 2006.pdf